

Naoko Sakaeda

NRC Postdoctoral Associate

NOAA Earth System Research Laboratory

Physical Sciences Division

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Research Interest

Tropical intraseasonal variability, Madden-Julian Oscillation, convectively coupled equatorial waves, tropical-extratropical interaction, weather-climate interaction

Education

Ph.D. Atmospheric Sciences, University at Albany, State University of New York, August 2015

Thesis: The variability of Madden-Julian oscillation convection and the role of Western Hemisphere circulation

Advisor: Paul E. Roundy

B.S. Atmospheric Sciences, University of Washington –Seattle, December 2009

Specialization tracks: meteorology and climate

Minor in Mathematics

Research Experience

NRC Postdoctoral Associate, Earth System Research Laboratory, NOAA

Advisor: George Kiladis

August 2015 – present

Research Assistant, Dept. of Atmospheric and Environmental Sciences, University at Albany

Advisor: Paul Roundy

June 2010 – August 2015

Research Assistant, Dept. of Atmospheric Sciences, University of Washington

Advisor: Robert Wood

June 2008 – June 2010

Peer-Reviewed Publications

Roundy, P. E, **Sakaeda, N**, Gloeckler, L, MacRitchie, K., 2016: Weather climate interactions and MJO influences, *Climate Extremes: Patterns and Mechanism*, Wang, S. et al., Amer. Geophys. Union Monographs Series, John Wiley & Sons Inc., Hoboken, JG, USA.
Accepted.

Sakaeda N. and Roundy, P. E., 2016: The equatorial intraseasonal atmospheric angular momentum associated with the MJO convective initiation. *Quart. J. R. Met. Soc.*, accepted.

Sakaeda N. and Roundy, P. E., 2015: The development of upper-tropospheric geopotential height anomalies over the Western Hemisphere during MJO convective initiation. *Quart. J. R. Met. Soc.*, in press. doi:10.1002/qj.2696

Sakaeda, N. and Roundy, P. E., 2015: The development of upper-tropospheric wind over the Western Hemisphere in association with MJO convective initiation. *J. Atmos. Sci.*, **72**, 3138-3160.

Sakaeda, N. and Roundy, P. E., 2014: The role of interactions between multi-scale circulations on the observed zonally averaged zonal wind variability associated with the Madden-Julian Oscillation. *J. Atmos. Sci.*, **71**, 3816-3836.

Sakaeda, N., R. Wood, and P. J. Rasch, 2011: Direct and semidirect aerosol effects of southern African biomass burning aerosol, *J. Geophys. Res.*, **116**, D12205, doi:10.1029/2010JD015540.

Publications in-Review

Sakaeda N. and Roundy, P. E., 2015: Gross moist stability and the Madden-Julian oscillation in reanalysis data. *Quart. J. R. Met. Soc.*, in review.

Honors and Awards

The Narayan R. Gokhale Distinguished Research Scholarship Award, 2015, Dept. of Atmospheric and Environmental Sciences, University at Albany, New York, USA

National Research Council Associateship Award, 2015

Graduate Student Association Professional Development Grant Award, Spring 2015, University at Albany, New York, USA

NSF travel award to attend World Weather Open Science Conference, August 2014, Montreal, Quebec, Canada

NSF Funded Participation to AMS 2014 Summer Policy Colloquium, June 2014, Washington, D. C., USA

Best Student Poster Presentation Award at AMS 31st Conference on Hurricanes and Tropical Meteorology, April 2014, San Diego, California, USA

Funded Participation to NCAR Advanced Study Program Summer Colloquium, June 2012,
Boulder, Colorado, USA

Professional Affiliations

Member, American Meteorological Society

Journal Reviewer

Climate Dynamics, 2015

Monthly Weather Review, 2012-2014

Journal of Climate, 2012

Teaching Experience

Teaching Assistant, Dept. Atmospheric and Environmental Sciences, University at Albany, Aug
2010-May 2011

Outreach Activities/Other Services

Volunteer Visitor, Young Women in Science, Flying Cloud Institute, Mar 2015, Crosby
Elementary School, Pittsfield, MA

Volunteer Visitor, Atmospheric science lab demonstrations, Feb 2014, 2015 Voorheesville High
School, Voorheesville, NY

Volunteer, Family Earth Day, April 2013, 2014, 2015, University at Albany, Albany, NY

Conference and Seminar Experiences

Sakaeda, N. and P. E. Roundy, 2015: The development of 200-hPa geopotential height in the
Western Hemisphere during MJO convective initiation. 7th Northeast Tropical Conference, June
2015, Dedham, MA, USA. Oral Presentation.

Sakaeda, N. and P. E. Roundy, 2014: The role of interactions between multi-scale circulations on
zonal wind variability associated with MJO. The World Weather Open Science Conference,
August 2014, Montreal, Quebec, Canada. Poster Presentation.

Sakaeda, N. and P. E. Roundy, 2014: The role of interactions between multi-scale circulations on
the observed zonally averaged zonal wind variability associated with the Madden-Julian
Oscillation. AMS 31st Conference on Hurricanes and Tropical Meteorology, April 2014, San
Diego, California, USA. Oral Presentation.

Sakaeda, N. and P. E. Roundy, 2014: The variability of spatiotemporal characteristics of anomalous convective envelopes associated with the Madden-Julian Oscillation. AMS 31st Conference on Hurricanes and Tropical Meteorology, April 2014, San Diego, California, USA. Poster Presentation.

Sakaeda, N. and P. E. Roundy, 2013: The role of multi-scale interactions on the observed zonally averaged wind variability associated with the Madden-Julian Oscillation. 6th Northeast Tropical Conference, May 2013, Rensselaerville, NY, USA. Poster Presentation.

Sakaeda, N. and P. E. Roundy, 2012: Interannual variability of convectively-coupled equatorial waves. American Geophysical Union Fall Meeting, December 2012, San Francisco, CA, USA. Poster Presentation.

Sakaeda, N. and P. E. Roundy, 2012: Interactions between the Madden-Julian Oscillation and equatorial Rossby waves through high-frequency transient eddies. AMS 30th Conference on Hurricanes and Tropical Meteorology, April 2012, Ponte Vedra Beach, Florida, USA. Oral Presentation.

Sakaeda, N. and P. E. Roundy, 2012: The seasonal variability in the global atmospheric circulation associated with the Madden-Julian Oscillation. AMS 30th Conference on Hurricanes and Tropical Meteorology, April 2012, Ponte Vedra Beach, Florida, USA. Poster Presentation.

Sakaeda, N. and P. E. Roundy, 2011: Global atmospheric circulation associated with the MJO in seasonally varying sea surface temperature states. 25th International Union of Geodesy and Geophysics General Assembly, June 2011, Melbourne, Australia. Poster Presentation.

Computer skills

MATLAB

Some experience with other computer programs: Java, R, NCL

Experience working on Windows and UNIX operating systems